Cynthia C. Minchew Deaton, Ph. D

404B 101 Gantt Circle Clemson University 864-656-5115

EDUCATION

Doctorate of Philosophy in Science Education

2002-2007

University of Georgia

Certifications: Interdisciplinary Qualitative Studies Certificate

Gifted Education Teacher Certificate (In-Field)

Dissertation: Examining evidence-based explanations in in-service science teachers' reflections

Dissertation Advisors: Drs. Lynn A. Bryan and Thomas R. Koballa, Jr.

Master of Education in Science Education

1998-2001

Georgia Southern University

Certification: Secondary Science Teaching Certificate for Broadfield Science (6-12)

Bachelor of Science in Biology

1993-1998

Valdosta State University

ACADEMIC APPOINTMENTS

Chair, Department of Teaching & Learning and

March 2019-current

Associate Professor of Science Education

Director, SC Center for Excellence for Innovation in

Mathematics and Science

August 2020–current

Honors Advisor, Department of Teaching & Learning Program Coordinator, Curriculum & Instruction PhD

August 2020--current May 2020-August 2020

Interim Chair, Department of Teaching & Learning and Associate Professor of Science Education

Clemson University

July 2018-March 2019

Associate Professor of Science Education

<u>and</u> Honors advisor for Elementary Education Program Department of Teacher Education, Clemson University

August 2015-current

Associate Professor of Science Education

<u>and</u> Coordinator for Elementary Education Program Department of Teacher Education, Clemson University

August 2014–August 2015

Assistant Professor of Science Education

Elementary Education Program

August 2008-August 2014

Department of Teacher Education, Clemson University

Assistant Professor of Curriculum and Instruction
Science Education, Elementary Education Program
Department of Curriculum and Instruction, University of Mississippi

August 2006-August 2008

OTHER PROFESSIONAL EXPERIENCE

Director

SC Center for Excellence for Innovation in Mathematics and Science August 2020-current

External Evaluator May 2018-current

Summer Undergraduate Research Experience (SURE) Program at Clemson: REU (Research Experiences for Undergraduates) Site: Solid-State Devices for Electronics, Photonics, and Magnetics Technology

Director & Principal Investigator

January 2015- August 2016

iScience: Inquiry Science with Mobile Learning (Professional Development Project)

Clemson University

Director & Principal Investigator 2013-2016

LMaST: Learning Mathematics and Science with Technology

Clemson University

Research Coordinator & Co-Principal Investigator 2015-2016

SC Center of Excellence for Mobile Learning Research Group. Clemson University & Anderson University Collaboration

Co-Director July 2014

The Clemson Integrated Mathematics and Science Technology Institute

Clemson University

Director & Principal Investigator 2013-2014

Project RES: Reform-based Environmental Science with Mobile Learning Integration

Clemson University

Director/Co-Director & Principal Investigator 2009-2013

Project RES: Reform-based Environmental Science Professional Development

Clemson University

Project Director & Principal Investigator 2005-2006

Project TEAMS: Teaching Environmental and Multicultural Science Learning and Performance Support Laboratory, University of Georgia

Research Assistant/Graduate Assistant 2003–2005

Knowles Science Teacher Mentoring Research Project Department of Science Education, University of Georgia

Field Placement Supervisor/Graduate Assistant Spring 2004

Alternative Certification Program for Secondary Science Department of Science Education, University of Georgia

Curriculum Developer and Programs Manager/Graduate Assistant

3DPD Virtual Solar System Project.

Learning and Performance Support Laboratory, University of Georgia

2002-2003

UNIVERSITY TEACHING EXPERIENCE

Department of Teaching & Learning, Clemson University

August 2008-Present

ED 8650 Curriculum Theory (online MED course)

ED Introduction to Scientific Inquiry & Environmental Science (Course for Emerging Scholars program)

EDF 9790: Introduction to Qualitative Research (Doctoral course)

ED 9940: Directed Research (Doctoral course)

ED 9910: Doctoral Dissertation Research

EDF 9710: Case Study and Ethnographic Research (Doctoral Course)

ED 901: Advanced Qualitative Research: Case Study Research (Doctoral course)

EDF 8790: Qualitative Research (Hyflex Doctoral course; both face-to-face and face-to-face/videoconference format)

ED 3970: Creative Inquiry (Undergraduate Research Course)

ED 4390: Education Honors Capstone

ED 4390 Independent Study: Science for Elementary Teachers

ED 4390 Independent Study: Environmental Science for Elementary Teachers

EDEL 4510/4511: Elementary Methods in Science Teaching (asynchronous, online course)

EDEL 4510/4511: Elementary Methods in Science Teaching (hyflex, hybrid course)

EDEL 4510/4511: Elementary Methods in Science Teaching (no supervision requirement)

EDEL 4510/4511: Elementary Methods in Science Teaching (includes supervising field experiences for students)

EDEL 45104511: Elementary Methods in Science Teaching (section for special education majors only)

EDEL 4510/4511H: Elementary Methods in Science Teaching (Honors section)

EDEL 4810: Directed Teaching in the Elementary School (Student Teaching)

ED 4380: Independent Study (Teaching Science in a School for the Deaf)

ED 4380: Independent Study (Elementary Methods in Science Teaching: Focus on Inquiry)

ED 902: Independent Study (Doctoral Course: Facilitating Environmental Science Professional Development)

ED 738: Cells and Genetics (Masters course for MAT Middle Grades program)

Department of Curriculum and Instruction, University of Mississippi

August 2006-August 2008

EDEL 404: Science in the Elementary School

EDEL 403: Mathematics in the Elementary School

EDLE 417: Action Lab in the Elementary School (includes supervising field experiences)

EDLE 464: Student Teaching in the Elementary School (includes supervising field experiences)

EDEL 615: Problems and Investigations in Teaching Elementary School Science (Graduate course)

EDSE 646: Advanced Methods of Teaching Secondary Science (Graduate course)

EDCI 351: Foundations of Education

EDUC 557: Special Topics in Education: Becoming a Reflective Practitioner (Online Graduate course)

HON 301: Honors Individual-Basis Studies (Conducting research in elementary science education)

K-12 TEACHING EXPERIENCE

Secondary Science Teacher

August 1999 – July 2002

Biology and Physical Science Teacher, Brunswick High School, Brunswick, Georgia

CURRENT LICENSURE

Secondary Science Teaching Certificate for Broadfield Science (7-12), Georgia Gifted Education Teacher Certificate (In-Field), Georgia

HONORS AND AWARDS

President's Leadership Institute member, 2018-2019

- Participation is based on nomination and competitive selection process; institute provides education and training for the development of leadership skills
- Jerry L. Shrum Outstanding Educator of the Year, 2018
 - Awarded by South Carolina Project Learning Tree and the Forestry Association of South Carolina for Project Learning Tree work and environmental education initiatives

South Carolina Top Project Learning Tree Facilitator, 2011

 Awarded for service and facilitation of Project Learning Tree workshops for preservice and in-service teachers.

National Technology Leadership Initiative Science Education Fellow, 2005

 Awarded by the Society of Information Technology in Teacher Education for outstanding paper presented at the Association for the Education of Teachers of Science conference demonstrating the use of technology in education

PUBLICATIONS (all names underlined are students; *denotes undergraduate student)

Peer Reviewed Articles:

- **Deaton, C** (June 2017). From Static to Circuits: Inquiry-based STEM Explorations of Electricity. Young Children.
- **Deaton, C.** & Malloy, J. (Electronically May 2017; Paper June 2017). Making a Case for a Blended Approach: The Need for the Design-Based Case Study. International Journal of Adult Vocational Education and Technology, 8(2), 72-81.
- **Deaton, C.** & *Stevens, C. (April 2017). 6 Ways to your students in nature. Kappa Delta Pi New Teacher Advocate.24(4)
- *Dickerson, S. & Deaton, C. (2017). Crime Scene Soil. Science & Children. 54(5), 38-44.
- **Deaton, C.** & *Johnson, C. (2016). Gaining Confidence in Teaching Science through Inquiry. The New Teacher Advocate, 24(1), 16-17.
- *Nicholson, H. & **Deaton, C.** (Dec 2015/Jan2016) Interacting with Butterflies. *Teaching Children Mathematics*, 22(5), 280-281.

- *Nicholson, H. & **Deaton, C**. (2014). Exploring Winter Weather. *Teaching Children Mathematics* journal. 21(5), 274-275
- Alston, D. & **Deaton**, **C.** (2014). Environmental Scavenger Hunt: Engaging students in research and collecting evidence of environmental issues using iPads. *Learning and Leading with Technology*, 41(7), 28-30.
- **Deaton, C. M.**, Deaton, B., & Koballa, T. (2014). The nature of elementary teachers' reflections on their science teaching practice with diverse students. *Action in Teacher Education*, *36*(3) *211-233*.
- *Hardin, C. & **Deaton**, **C**. (2014). Escape into Nature: Using photos to collect evidence of animals in their habitats. *Science and Children*, 51(7), 38-44
- <u>Tannebaum, R.</u>, Hall, A., & **Deaton, C**. (2013). The development of reflective practice in American education. *American Educational History Journal*, 40(2), 241-259
- **Deaton, C.,** Deaton, B. E., Ivankovic, D., & Norris, F. A. (2013). Creating Stop-Motion Videos with iPads to Support Students' Understanding of Cell Processes: 'Because You Have to Know What You're Talking about to Be Able to Do It". *Journal of Digital Learning in Teacher Education*, 30(2).
- Kamp, B. L., & **Deaton, C. C.** (2013). Move, Stop, Learn: Illustrating Mitosis through Stop-Motion Animation. *Science Activities: Classroom Projects and Curriculum Ideas*, *50*(4), 146-153.
- **Deaton, C.** & Deaton, B. (2013). Engaging diverse learners in the elementary science classroom. *Kappa Delta Pi Record*, 49(2), 88-92.
- **Deaton, C.** (2013). Teacher's reflections on effectively managing their classroom: A discussion of how two experienced science teachers examined their classroom management practices. *Reflective Practice: International and Multidisciplinary Perspectives*, 14(2), 240-257.
- **Deaton, C.M**. (2012). Using a reflection framework to guide video analysis of science teaching practice. *Electronic Journal of Science Education*, 16(2), 2-21, Retrieved from http://ejse.southwestern.edu/article/view/9054.
- **Deaton, C.**, *<u>Dodd, K.</u>, *<u>Drennon, K.</u>, and *<u>Nagle, J.</u> (2012). Prey Play: Learning about predators and prey through an interactive, role-play game. *Science Activities*, 49(4), 128-137.
- Deaton, C. & Mathews, C. (2012). Environmental decision-making in our backyard. Science Scope, 36(3), 10-14.
- **Deaton, C.M.,** & Deaton, B. (2012). Using mentoring to foster professional development among undergraduate instructional leaders. *Journal of College Science Teaching*, 42(1), 58-62.
- Cook, M. & **Deaton, C. M**. (2012). On the case: Implementing environmental science case helps students experience science in a meaningful way. *Science and Children*, *50*(1), *70-73*.
- **Deaton, C. M.** & Cook, M. (2012). Using role-play and case study to promote student research on environmental science. *Science Activities*, 49(3), 71-76.
- Deaton, C. & Cook, M. (2012). Banishing Bradford pears. Science and Children, 49(7), 26-30.
- **Deaton, C. M.,** Chessin, D. & <u>Coskey, S.</u> (2012). Learning through Building: Constructing knowledge of design. *Science Activities*, *49*(2), *44-53*.

- Quigley, C., Marshall, J., **Deaton, C.**, Cook, M., & Padilla, M. (2011). Challenges to inquiry teaching and suggestions for how to meet them. *Science Educator*, 19 (1).
- **Deaton, C. M.**, Deaton, B. & Leland, K. (2010). Start writing and interacting in science: Using Interactive Reflective Logs. *Science and Children*, 48(3), 44-47.

 This manuscript was also hand selected to appear as a chapter in two different NSTA Press books (see Published Book Chapters below).
- Koballa, T., Bradbury, L., Glynn, S., & **Deaton, C. M**. (2008). Conceptions of science teacher mentoring and mentoring practice in an alternative certification program. *Journal of Science Teacher Education*, 19, 391-411.
- Koballa, T., Bradbury, L., & **Deaton, C. M.** (2008). Realizing your mentoring success. *Science Teacher*, 75, 43-47.
- **Minchew, C**. (2004). Classroom management tips and strategies: A list and summary of internet resources. Available from The BRIDGE (Building Resources: Induction and Development for Georgia Educators), http://www.infoxnet.org/myweb_edu/gstep/induction/.
- Minchew, C. (2004). A review of Huber and Moore's (2001) A model for extending hands-on science to be inquiry. Available from The BRIDGE (Building Resources: Induction and Development for Georgia Educators), http://www.infoxnet.org/myweb_edu/gstep/induction/.
- **Minchew, C.** (2004). Funding sources for teachers. Available from The BRIDGE (Building Resources: Induction and Development for Georgia Educators), http://www.infoxnet.org/myweb_edu/gstep/induction/
- **Minchew, C.** (2004). Collaboration: Getting grant funding. Available from The BRIDGE (Building Resources: Induction and Development for Georgia Educators), http://www.infoxnet.org/myweb_edu/gstep/induction/
- **Minchew, C.** (2004). Funding sources for science students. Available from The BRIDGE (Building Resources: Induction and Development for Georgia Educators), http://www.infoxnet.org/myweb_edu/gstep/induction/.
- **Minchew, C.** (2004). A few tips for keeping students focused and on-task. Available from The BRIDGE (Building Resources: Induction and Development for Georgia Educators), http://www.infoxnet.org/myweb_edu/gstep/induction/.

Published Book Chapters or Sections:

- **Deaton, C**. & Malloy, J. (2018). Design-based Case Study: Refining Interventions through Systematic, Iterative Methods. In V. Wang ad T. Reio (Eds.), Handbook of Research on Innovative Techniques, Trends, and Analysis for Optimized Research Methods (pp. 50-62). Hershey, PA: IGI Global
- **Deaton, C.M.,** Linder, S., & Deaton, B. (2018). Piecing the puzzle together: Building a dialogue for engaging multiple disciplines in inquiry-based mobile learning through professional development. In D. Herro, S. Arafeh, R. Ling, & C. Holden (Eds.) Mobile Learning: Perspectives on Practice and Policy (pp. 191-210). Charlotte, NC: Information Age Publishing.

- Deaton, B., Herron, J., & **Deaton, C.M**. (2018). Mobile technology and learning. In A. Musgrove, J. Powers, & V. Bryan (Eds.), Handbook of Research on Human Development in the Digital Age (pp. 87-108). Hershey, PA: IGI Global.
- **Deaton, C.M.,** Linder, S., & Deaton, B. (2017). Identifying effective uses of mobiles for encouraging 21stcentury skills. In S. Keengwe (Ed.) Handbook of Research on Mobile Technology, Constructivism, and Meaningful Learning (pp. 106-122). Hershey, PA: IGI Global
- **Deaton, C.** (Ed). Council for Elementary Science International Sourcebook: Exploring Environmental Science Topics and Integrating Mobile Learning.
- **Deaton, C. M**. Deaton, B., & Leland, K. (2012). Start writing and interacting in science: Using Interactive Reflective Logs, In a NSTA Press Compendium, A Year of Inquiry: A Collection for Elementary Educators.
- **Deaton, C. M.** Deaton, B., & Leland, K. (2011). Start writing and interacting in science: Using Interactive Reflective Logs, In J. Wheeler-Toppen (Ed), *Science the "Write" Way*. NSTA Press: Arlington, VA.
- **Minchew, C.** (2007). Case Study: Using technology to reflect on science teaching. In A. Recesso & C. Orrill, Technology integration into teaching: The technology and learning continuum. Boston: Houghton-Mifflin.

Invited Manuscripts:

Deaton, C. M. (2010). A review of Investigating Science Communication in the Information Age. Implications for public engagement and popular media. *Integrative and Comparative Biology*, 50(5), 916-917.

GRANTS

Funded External Grant Proposals:

- \$123,104 United States Department of Education, South Carolina Commission on Higher Educations' Improving Teacher Quality Higher Education Grant Program
- **Deaton, C. M.**, Hardwick, R., and Malloy, J. (2015-2016). iScience: Inquiry Science with Mobile Learning. Grant funded by the South Carolina's Commission on Higher Education, Improving Teacher Quality Grant Program.
 - Partnered with High-needs LEA (Spartanburg School District 7)
- \$274,598 United Stated Department of Education's Mathematics Science Partnership (MSP) grant **Deaton, C.,** Tyminski, A., & Hardwick, R. (2013-2016). Learning Mathematics and Science with Technology.
 - Partnered with High-needs LEA (Spartanburg School District 7)
- \$16,121 United States Department of Education, South Carolina Education Improvement Act Center of Excellence Grant Program
 - Deaton, C. and Linder, S (2015-2016). SC Center of Excellence for Mobile Learning: Research Group.
- \$103,719 United States Department of Education, South Carolina Commission on Higher Educations' Improving Teacher Quality Higher Education Grant Program Supplemental Grant
- Williams, C., **Deaton, C.,** Bannister, N., & Hardwick, R. (2014). The Clemson Integrated Mathematics and Science Technology Institute. Supplemental Summer Grant Project funded by South Carolina's Commission on Higher Education, Improving Teacher Quality Grant Program
 - Partnered with High-needs LEAs

- \$100,000 United States Department of Education, South Carolina Commission on Higher Educations' Improving Teacher Quality Higher Education Grant Program
- **Deaton, C. M.**, Hardwick, R. & Visser, R. (2013-2014). Project RES: Reform-based Environmental Science. Grant funded by South Carolina's Commission on Higher Education, Improving Teacher Quality Grant Program.
 - Partnered with High-needs LEA (Spartanburg School District 7)
- \$50,000 United States Department of Education, South Carolina Commission on Higher Educations' Improving Teacher Quality Higher Education Grant Program
- Cook, M. & **Deaton, C. M.** (2012-2013). Project RES: Reform-based Environmental Science (Technology Integration). Supplemental Technology Grant Project funded by South Carolina's Commission on Higher Education, Improving Teacher Quality Grant Program.
- \$329,169 United States Department of Education, South Carolina Commission on Higher Educations' Improving Teacher Quality Higher Education Grant Program
- Cook, M. & **Deaton, C. M.** (2009-2013). Project RES: Reform-based Environmental Science. Grant funded by South Carolina's Commission on Higher Education, Improving Teacher Quality Grant Program
 - 4-year grant (Funding for 1st year: \$81,123; Funding for 2nd year: \$80,000; Funding for 3rd year: \$72,000 and \$6,046; Funding for 4th year: \$90,000)
 - Partnered with High-needs LEA (Orangeburg County School District 3 and 5)
- \$37,000 United States Department of Education, Georgia's Improving Teacher Quality Higher Education Program,
 Title II. Part B. Math Science Partnership
- Deaton, B. & **Minchew**, **C**. (2006). Morgan County Schools Math Science Partnership Grant. Grant funded by Georgia's Improving Teacher Quality Higher Education Program.
 - Co-authored
- \$46,770 United States Department of Education, Georgia's Improving Teacher Quality Higher Education Program,
 Title II, Part A of the "No Child Left Behind Act"
- Deaton, B., **Minchew, C.**, Wang, F., & Recesso, A. (2005). Project TEAMS: Teaching Environmental and Multicultural Science. Grant funded by Georgia's Improving Teacher Quality Higher Education Program.
 - Partnered with Hall County Schools

Funded Internal Grant Proposals:

\$8,000 Clemson University's Creative Inquiry Grant Project

- **Deaton, C.** (2014-2015). Engaging Elementary Teachers and Students in Outdoor Learning Experiences with Mobile Learning
 - (1st semester of funding \$2000; 2nd semester of funding \$2000; Travel funding: \$4000)

\$4,000 Clemson University's Creative Inquiry Grant Project

- **Deaton, C**. & Putman, B. (2013-2014). Engaging Elementary Teachers and Students in Outdoor Learning Experiences
 - (1st semester of funding \$2000; 2nd semester of funding \$2000)

\$3,000 Clemson University's Creative Inquiry Grant Project

Putman, B.J., **Deaton, C.**, Russell, P., and Harding, D.(Spring 2013-Spring 2014). "DESIGN+BUILD of Outdoor Supplemental Science-Based Learning Environments,"

- (1st semester of funding: ~\$3000; Actual funding each semester is dependent on the number of students enrolled and that funding may exceed or be below initial funding approved)
- \$9,000 University of Mississippi's Online Course Development Grant Program

- **Deaton, C. M.** (2007- 2008). Developing an Online Teacher Education Course. Grant funded by University of Mississippi's Department of Independent and Online Learning
- \$4,000 Partnership for Reform in Science & Mathematics Grant
- **Minchew, C.**, Deaton, B., & Koballa, T. (2005). Preservice Secondary Science Teachers' Utilization of Frameworks within Evidence Based Inquiry (EBI) Methodology and Tool. Grant funded by Partnership for Reform in Science & Mathematics (PRISM).
- \$4,000 Partnership for Reform in Science & Mathematics Grant
- Minchew, C. & Bryan, L. (2004). Evaluating the Effectiveness of Pre-service Secondary Science Teachers' Reflective Portfolios. Grant funded by Partnership for Reform in Science & Mathematics (PRISM)

External Grants Currently Under Review:

\$404.532 National Science Foundation REU Grant

Harrell, W. R., Sosolik, C., Ramirez, B., **Deaton, C. M**., Hubbard, S. (under review). REU Site: Solid-State for Electronics, Photonics, and Magnetics Technology.

\$600,000 National Science Foundation BIORETS Grant

Reay-Jones, F.P.F & Deaton, C. M. (under review). BIORETS: Biodiversity in Agroecosystems.

PRESENTATIONS (all names underlined are students)

International & National conference papers:

- **Deaton, C.** & <u>Pokhrel, S.</u>, (TBP: January 2022). Examining the Science Teaching Beliefs and Self-Efficacy Belief of Elementary Pre-Service Teachers Enrolled in Science and Non-Science Emphasis. Paper to be presented at the annual Association of Science Teacher Education national conference, Greenville, SC.
- Singh, K., & Deaton, C. (TBP: January 2022). Examining preservice teachers' reflection on their science teaching through Epistemic Network Analysis. Paper to be presented at the annual Association of Science Teacher Education national conference, Greenville, SC.
- **Deaton, C. & Eicher, L.** (April 2021). Changes in Preservice Elementary Teachers' Science Teaching Self-Efficacy and Reformed Science Teaching and Learning Beliefs. Paper presented at the annual National Association for Research in Science Teaching, Virtual Conference.
- **Deaton, C.** & Malloy, J. (March 2020: COVID-19 Cancelled). **A**rguing about Science: Empowering & developing issues-based pedagogies through debate. Paper to be presented at National Youth-At-Risk Conference, Savannah, GA. Cancelled due to COVID-19 travel policies at Clemson University.
- **Deaton, C.** & <u>Singh, K.</u> (January 2020). Identifying the focus of preservice elementary teachers' philosophies and reflections. Paper presented at the 2020 annual Association of Science Teacher Education national conference, San Antonio, TX.
- <u>Pokhrel, S.</u> & **Deaton, C.** (January 2020). Following their Path: Identifying the sustainability of professional development focused mobile learning in the science classroom. Paper presented at the 2020 annual Association of Science Teacher Education national conference, San Antonio, TX.
- Deaton, C. & Singh, K. (April 2019) Creative Life Cycles: Engaging students in plant and animal life cycles through

- stop-motion videos. Workshop presented at the 2019 annual National Science Teachers Association Conference, St. Louis, MO
- **Deaton, C.** & Singh, K. (April 2019) Coding Centers: Reinforcing science content with creative coding activities Workshop presented at the 2019 annual National Science Teachers Association Conference, St. Louis, MO
- **Deaton, C.** & Deaton, B (June 2018). Examining teachers' use of inquiry and mobiles for encouraging 21st Century Skills. Paper presented at the 2018 EdMedia + Innovate Learning Conference in Amsterdam, Netherlands
- Deaton, B. & **Deaton, C** (June 2018). Mobile Technology and Learning: Ideation to Implementation to Iteration. Paper presented at the 2018 EdMedia + Innovate Learning Conference in Amsterdam, Netherlands
- **Deaton, C** (2018). Encouraging Communication, Collaboration, and Ownership of Learning Through the Use of Mobiles. Workshop presented at the 2018 National Youth At Risk conference, Savannah, Georgia.
- Deaton, B., **Deaton, C.,** & Linder, S. (April 2017). Examining Inquiry-Based Mobile Learning for Multiple Disciplines and Grade Levels. Presented at the annual American Educational Research Association, San Antonio, Texas
- Linder, S. & **Deaton, C**. (March 2017). Creativity, communication, and connections: Engaging in stem with young. Presented at the National Youth-At-Risk Conference, Savannah, Georgia.
- **Deaton, C. &** <u>Tannebaum, R.</u> (April 2015). Examining Preservice Elementary Teachers' Reflective Practice and Science Teaching Philosophies as Indicators for Course and Program Revision. Paper presented at the annual American Educational Research Association conference. Chicago, Illinois.
- **Deaton, C.** (March 2015). Using Mobile Learning to Engage K-6th grade students in becoming stewards of their environment. Workshop presented at the annual meeting of the National Science Teachers Association. Chicago, Illinois.
- **Deaton, C**. & Mathews, S. (April 2014). Encouraging Environmental Stewardship through an integrated Science, Social Studies, and Literacy activity. Presented at the annual meeting of the National Science Teachers Association. Boston. Massachusetts.
- **Deaton, C.,** Deaton, B., and Ivankovic, D. (January 2014). Creating Stop-Motion Videos with iPads to Support Students' Understanding of Cell Processes: "Because you have to know what you're talking about to be able to do it". Paper presented at the annual meeting of the Association for Science Teacher Education, San Antonio, Texas.
- <u>Tannebaum, R. P.,</u> & **Deaton, C. M**. (October 2013). The development of normal schools in southeastern United States. Presented at the annual meeting for the Organization of Educational Historians (OEH), Chicago, IL.
- **Deaton, C.**, Deaton, B., Ivankovic, D., & Norris, A. (June 2013). *Integrating iPads for illustrating and demonstrating an understanding of mitosis*. Paper presented at the annual meeting of the international ED-MEDIA World Conference on Educational Multimedia, Hypermedia, and Telecommunications, Victoria, British Columbia. *This proposal and paper received some of the highest ratings and was invited to submit to an AACE journal*.
- **Deaton, C.,** Deaton, B., & Walworth, M. (June 2013). *Integrating iPads for learning science and learning how to teach science in the elementary classroom.* Paper presented at the annual meeting of the international ED-MEDIA World Conference on Educational Multimedia, Hypermedia, and Telecommunications, Victoria, British Columbia.

- **Deaton, C**. & <u>Tannebaum, R</u>. (April 2013). *Understanding Preservice Elementary Teachers' Beliefs about Science Teaching and Reflective Practice*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Rio Grande, Puerto Rico.
- **Deaton, C.,** Cook, M., <u>Kamp. B.,</u> & <u>Alston. D</u>. (January 2013). Examining the Relationship Between In-service Teachers Science Content Knowledge, Self-efficacy, and Context Beliefs. Paper presented at the annual meeting of the Association for Science Teacher Education, Charleston, South Carolina.
- <u>Tannebaum, R. & Deaton, C.</u> (October 2012) *The development of critical reflection in education (1980-2012).* Paper presented at the annual meeting of the Organization of Educational Historians. Chicago, Illinois.
- **Deaton, C.** (April 2012). Examining a framework for guiding teacher reflections. Paper presented at the annual meeting of the American Education Research Association, Vancouver, Canada.
- **Deaton, C.M.** & Cook, M. (March 2012). Using case studies to teach science in the elementary and middle school classrooms. Paper presented at the annual meeting of the National Science Teachers Association, Indianapolis, Indiana.
- **Deaton, C.** (March 2012). The nature of elementary science teachers reflections when working with English language learners. Paper presented at the annual meeting of the National Association for Research in Science Teaching Indianapolis, Indiana.
- **Deaton, C.** & Deaton, B. (March 2012). *The focus and relationships negotiated during undergraduate science instructor mentoring.* Paper presented at the annual meeting of the National Association for Research in Science Teaching, Indianapolis, Indiana.
- **Deaton, C. M.** & Deaton, B. (January 2011). *Effects of mentoring in undergraduate instructional leaders*. Paper presented at the annual meeting of the Association for Science Teacher Education, Minneapolis, Minnesota.
- Cook, M. & **Deaton, C. M.** (January 2011). *Using case studies to examine environmental issues*. Paper presented at the annual meeting of the Association for Science Teacher Education, Minneapolis, Minnesota.
- Deaton, B., **Deaton, C. M.,** & Recesso, B. (October 2009). *Preservice teachers' use of the Video Analysis Tool for formative assessment: I can find the problem but I still can't solve it.* Paper presented at the annual meeting of the Association for Educational Communications and Technology, Louisville, Kentucky.
- **Deaton, C. M.,** Koballa, T., & Bryan, L. (April 2009). *Examining evidence-based explanations in in-service science teachers' reflections*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Garden Grove, California.
- **Deaton, C. M.**, Koballa, T., Bryan, L., & Deaton, B. (April 2009). *The nature of elementary teachers' explanations of their science teaching practice in multicultural classrooms*. Paper presented at the annual meeting of the American Education Research Association, San Diego, California.
- Deaton, B., Recesso, A., & **Deaton, C. M**. (April 2009). Supporting preservice teacher formative assessment through video evidence and frameworks. Paper presented at the annual meeting of the American Educational Research Association, San Diego, California.

- Deaton, B., Recesso, A., & **Deaton, C. M**. (January 2009). *Preservice teachers' use of evidence-informed approaches for formative assessment with the Video Analysis Tool*. Paper presented at the annual meeting of the Association for Science Teacher Education, Hartford, Connecticut.
- **Deaton, C. M.**, Koballa, T., Bryan, L., & Deaton, B. (January 2009). Examining elementary teachers' use of the Video Analysis Tool (VAT) and explanations to reflect on their science teaching practice. Paper presented at the annual meeting of the Association for Science Teacher Education, Harford, Connecticut.
- Minchew, C. M., Deaton, B., Recesso, A., & Hannafin, M. (April 2006). *In-service teachers' initial reflections developed through an evidence-based tool, Video Analysis Tool.* Paper presented at the annual meeting of the National Association for Research in Science Teaching, San Francisco, California.
- Upson, L., Koballa, T., **Minchew, C.**, Inyega, J., & Parlo, A. (April 2005). *Examining the link between mentor teaching advice and protégé classroom practice within a physical science context.* Paper presented at the annual meeting of the National Association for Research in Science Teaching, Dallas, Texas.
- Koballa, T., Upson, L., **Minchew, C.**, Parlo, A., & Inyega, J. (January 2005). *Using technology to support evidence-based science teaching and mentoring*. Paper presented at the annual meeting of the Association for the Education of Teachers of Science conference, Colorado Springs, Colorado.
- **Minchew, C.**, Deaton, B., & Bryan, L. (April 2004). *Teacher as reflective practitioner: Using video case tools to promote teacher inquiry.* Paper presented at the annual meeting of the National Association for Research in Science Teaching, Vancouver, British Columbia.

International & National Conference presentations:

- **Deaton, C**. & Singh, K (2018). Stop-Motion Life Cycles (Grades 2-5). Presented at the National Science Teachers Association Conference. Atlanta. Georgia.
- **Deaton, C.,** (March 2016). The Light Side of the Force: Exploring Electricity. Presented at the annual meeting of the National Science Teachers Association, Nashville, Tennessee.
- **Deaton, C.,** Malloy, J, & <u>Odutola, A.</u> (March 2016). Using Digital Literacies and Place-Based Learning to Engage Students in Inquiry-Based Science. Workshop presented at the annual meeting of the National Science Teachers Association, Nashville, Tennessee.
- **Deaton, C.** (March 2015). Environmental Scavenger Hunt: Hunting for Environmental Issues in Our Community. Presented at the Council for Elementary Science International's Elementary Extravaganza at the annual National Science Teachers Association Conference: Chicago, Illinois
- **Deaton, C.** Ivankovic, D, & Deaton, B. (April 2014). Stop-Motion Videos. Workshop presented at the annual meeting of the National Science Teachers Association, Boston, Massachusetts.
- **Deaton, C** & Narayan, R. (April 2014). Using and Coaching Reflective Activities to Support Teacher Professional Development. Presented at the annual meeting of the National Science Teachers Association. Boston, Massachusetts.
- Cook, M. & **Deaton, C**. (January 2013). Examining the Effects of a Professional Development Program for K-8 Science Teachers. Paper presented at the annual meeting of the Hawaii International Conference on Education, Honolulu, Hawaii.

- **Deaton, C.** & Hughes, S. (March 2012). *The process skills sleuth*. Presented at the annual meeting of the National Science Teachers Association, Indianapolis, Indiana.
- Hughes, S. & **Deaton, C**. (March 2012). *Building a mystery*. Presented at the annual meeting of the National Science Teachers Association, Indianapolis, Indiana.
- Cook, M. & **Deaton**, **C. M**. (January 2011). *Using case studies to examine environmental issues*. Paper presented at the annual meeting of the Association for Science Teacher Education, Minneapolis, Minnesota.
- Deaton, B., **Deaton, C. M.,** & McLeod, M., <u>Finch, E., Sherman, A.,</u> & <u>Waugaman, G.</u> (October 2009). *Promoting mentor-protege relationships among student leaders*. Presented at the annual meeting of the College Reading and Learning Association, Richmond, Virgina
- **Deaton, C. M.** & Coskey, S. (March 2007). Build It Up!: Inquiry with Recycled Materials. Presented at the annual meeting of the National Science Teacher Association, St. Louis, Missouri.
- Chessin, D.A., **Deaton, C.M.**, & <u>Coskey, S.</u> (March 2007). *Get Involved with Wetlands!* Presented at the annual meeting of the National Science Teacher Association, St. Louis, Missouri.
- Deaton, B., **Minchew, C. M.**, Hay, K., & Recesso, A. (October 2003). *Apprenticeship in cyberspace*. Presented at the annual meeting of the Association for Educational Communications and Technology, Anaheim, California.
- Deaton, B., **Minchew, C.,** Hay, K., Bryan, L., & Recesso, A. (June 2003). *Teacher apprenticeship with Modeling-Based Inquiry and the Virtual Solar System.* Presented at the annual meeting of the World Conference on Educational Multimedia, Hypermedia & Telecommunications, Honolulu, Hawaii.
- Tsurusaki,B., Amiel, T., Deaton, B., **Minchew, C.,** Recesso, A., Shaw, J., Thomson, N., Bryan, L., & Hay, K. (June 2003). *Virtual reality modeling in science*. Poster presentation at the annual meeting of the World Conference on Educational Multimedia, Hypermedia & Telecommunications, Honolulu, Hawaii.

State & Regional Conference papers:

- **Deaton, C.** & Hughes, S. (November 2012). *Build it Up.* Paper presented at the annual conference for the regional meeting of the National Science Teachers Association, Atlanta, Georgia.
- **Deaton, C.**, Ivankovic, D., Deaton, B. and Norris, F. (October 2012). *Examining students' use of iPads to support science content understanding in an introductory biology courses.* Presented at the annual conference of Southeastern Association for Science Teacher Education, Macon, Georgia.
- Ivankovic, D., Norris, F., **Deaton, C.**, and Deaton, B. (April 2012). *Students' use of mobile learning devices to support science content understanding in an introductory biology course*. Presented at the Annual Meeting of the Association of Southeastern Biologists (ASB). Athens, Georgia.
- **Deaton, C. M.** & Cook, M. (October 2010). Examining self-efficacy and context beliefs of science teachers after professional development. Presented at the annual meeting of the Southeastern Association for Science Teacher Education, Decatur, Georgia.
- Deaton, B., & **Deaton, C. M**. (February 2010). *Using mentoring to foster professional development among undergraduate instructional leaders*. Presented at the annual meeting of the Eastern Educational Research Association. Savannah, Georgia.

- Deaton, B., **Minchew, C.,** Recesso, A., & Butler, M. (October 2005). *The use of direct evidence as a basis for reflection on practice*. Paper presented at the annual conference of the Southeastern Association for Science Teacher Education, Athens, Georgia.
- **Minchew, C.** (October 2004). Science teachers' beliefs about classroom management practices. Paper presented at the annual meeting of the Southeastern Association for the Education of Teachers in Science conference, Gainesville, Florida.
- **Minchew, C.**, Upson, L., Koballa, T., Inyega, J., & Parlo, A. (October 2004). *Idealized versus Realized: Teacher beliefs regarding the role of a mentor in science teaching*. Paper presented at the annual meeting of the Southeastern Association for the Education of Teachers in Science conference, Gainesville, Florida.

State & Regional Conference presentations:

- Kamp, B. L., Alston, D. M., Deaton, C. M., & Cook, M., (April 2013). Using RASCH Analysis to Determine the Validity of Instruments Used for an Environmental Educational Research Study. Poster Presented at the 2013 College of Health, Education, and Human Development Research Forum, Clemson, SC.
- Alston, D. M., Kamp, B. L., **Deaton, C. M.**, & Cook, M., (April 2013). Context Beliefs' Effects on Content Knowledge of Rural Environmental Science Teacher. Poster Presented at the Clemson University Graduate Research and Discovery Symposium, Clemson, SC.
- **Deaton, C**. & Hughes, S (November 2012). *Plant Clues*. Presented at the regional meeting of the National Science Teachers Association, Atlanta, Georgia
- **Deaton, C**. & <u>Mattison, C</u>. (November 2012). *Modeling Landforms*. Presented at the regional meeting of the National Science Teachers Association, Atlanta, Georgia
- **Deaton, C.**, <u>Dodd, K.</u> & <u>Drennon, K.</u> (November 2012). *Prey Play*. Presented at the regional meeting of the National Science Teachers Association, Atlanta, Georgia
- Miller, A. & **Deaton, C.** (June 2010). What is Project Learning Tree. Workshop conducted at the 2010 Clemson University's Camp Read-a-Rama Summer Training, Clemson, South Carolina
- <u>Dunn, K., Deaton, C. M., Cook, M. & Hall, K. (November 2009). Examining backyard environmental issues with elementary school students.</u> Presented at the annual conference for the South Carolina Science Council, Myrtle Beach, South Carolina.
- <u>Dunn, K., Deaton, C. M., Cook, M. & Hall, K. (November 2009). Examining backyard environmental issues with middle schoool students.</u> Presented at the annual conference for the South Carolina Science Council, Myrtle Beach, South Carolina.
- Hall, K., Cook, M., **Deaton, C. M**. & <u>Dunn, K</u>. (November 2009). *Dyeing with Indigo in the Classroom: Redox Chemistry Come Alive!* Workshop presented at the annual conference for the South Carolina Science Council, Myrtle Beach, South Carolina.
- Cook, M. & **Deaton, C. M**. (October 2009). *Examining in-service science teachers' beliefs about their content knowledge and teaching practice*. Poster presented at the Southeastern Association for Science Teacher Education, Kennesaw, Georgia.

- **Deaton, C. M.** (October 2008). The nature of elementary teachers' explanations on their science teaching practice in multicultural classrooms. Poster presented at the Southeastern Association for Science Teacher Education, Columbia, South Carolina.
- **Minchew, C.**, Deaton, B., Butler, M., & Recesso, A. (October 2005). Lessons learned: Reflections from a novice grant writer and professional development facilitator. Presented at the annual conference of the Southeastern Association for Science Teacher Education, Athens, Georgia.
- Staples, L., Pierce, G., **Minchew, C.**, Deaton, B., Butler, M., Recesso, A. (October 2005). *The teacher perspective:**Reflections from elementary science teachers on their participation in a professional development course.

 Presented at the annual conference of the Southeastern Association for Science Teacher Education,

 Athens, Georgia.
- **Minchew, C**. (May 2005). *Prospectus in progress: Examining evidence-based explanations of practice*. Presented at the spring conference for the University of Georgia's Student Qualitative Inquiry Group, Athens, Georgia.
- **Minchew, C.** (May 2005). Evaluating the effectiveness of pre-service Secondary Science Teachers' Reflective Portfolios. Presented at the Spring 2005 Partnership for Reform in Science & Mathematics (PRISM) Professional Network Retreat, Brasstown, Georgia.
- Koballa, T., Upson, L., **Minchew, C.,** & Inyega, J. (May 2004). *Improving beginning teacher mentoring experiences: GSTEP framework as a guide for using direct evidence to improve practice.* Presented at Georgia Systemic Teacher Education Program Research Symposium, Athens, Georgia.
- **Minchew, C**. (May 2004). *Anthropology: The science*. Poster presented at the University of Georgia's Department of Science Education Colloquium, Athens, Georgia.
- **Minchew, C.**, Amiel, T., Hay, K., Bryan, L., Thomson, N., & Recesso, A. (February 2003). *Virtual Astronomy: Putting the solar system in your hand*. Presented at the annual meeting of the Georgia Science Teachers Association, Jekyll Island, Georgia.
- **Minchew, C.** (July 2001). Coastal Georgia environmental issues. Poster presented at the Georgia Southern University's Teachers for Environmental Science, Society, and Industry Summer Course, Statesboro, Georgia.

Invited Presentations: International & National Conferences:

Koballa, T., Upson, L., **Minchew, C.**, Parlo, A., & Inyega, J. (March 2005). *Using technology to support evidence-based science teaching and mentoring*. Paper presented at the annual meeting of the Society of Information Technology in Teacher Education conference, Phoenix, Arizona. *Presentation was associated with the acceptance of an award, National Technology Leadership Initiative Science Education Fellow 2005*

Invited Presentations: Regional Conferences/Meetings:

Deaton, C. M. & Deaton, B. (June 2010). *Environmental Science Investigations*. Workshop presented at the annual Southeastern Consortium for Minorities in Engineering, Clemson, SC.

Invited Presentations/Lectures: University and Departmental:

- **Deaton, C.** M. (2012). Examining students' beliefs and use of iPad in undergraduate biology courses. Presented at the January 2012 Clemson University's School of Education Faculty Meeting. Clemson, South Carolina
- **Deaton, C. M.** (April 2010). *Becoming a reflective practitioner and science teacher mentor.* Presentation at Clemson University's ILEP Conference, Clemson, South Carolina.

- **Deaton, C.M.,** & Deaton, B. (Spring 2010). Case Study Research. Presented at Clemson University's ED F 879: Qualitative Research course, Clemson, South Carolina.
- **Deaton, C.M**. (Fall 2009). *Strategies and approaches for mentoring*. Presented at Clemson University's Supplemental Instruction Mentoring meeting, Clemson, South Carolina.
- **Deaton, C.M.** (Spring 2009). *Developing effective lesson plans and goals for instruction*. Presented at Clemson University's ED 111: Supplemental Instruction course, Clemson, South Carolina.
- **Deaton, C.M.**, & Deaton, B. (Spring 2009). *Methods for collecting data: Participant observation*. Presented at Clemson University's ED F 879: Qualitative Research course, Clemson, South Carolina.
- **Deaton, C. M.** (March 2008). *Using technology to collaborate: Using collaborative documents*. Presented at the University of Mississippi's School of Education Faculty Enhancement Seminar, University, Mississippi.
- Chessin, D. A., & **Deaton, C. M**. (May 2007). Keynote: *First years of teaching*. Presented at the University of Mississippi's Zeta Eta Chapter of Kappa Delta Pi's annual spring initiation ceremony, University, Mississippi.
- Deaton, B., & **Deaton, C. M**. (February 2007). *Blogging and gaming*. Presented at the University of Mississippi's EDCI 557: Computer Concepts and Applications for Educators course, University, Mississippi.
- **Deaton, C. M.** (January 2007). *Introduction to reflection*. Presented at the University of Mississippi's EDEL 351: Foundations for Professional Growth course, University, Mississippi.
- **Deaton, C. M.** & Deaton, B. (December 2006). *A vision of reflective practice*. Presented at the University of Mississippi's School of Education Faculty Enhancement Seminar, University, Mississippi.
- **Deaton, C.M.** & Deaton, B. (September 2006). *Introduction to reflection and reflective practice*. Presented at the University of Mississippi's EDCI 635: Reflective Teaching course, University, Mississippi.
- **Minchew, C**. (Fall 1999). *Classroom management strategies*. Presentation for Georgia Southern University's Secondary School Methods Course, Statesboro, Georgia.

ADVISING

Current Advising Work:

- Honors Advisor, Department of Teaching & Learning (August 2020-current)
- Chair of Doctoral Committee for Khushbu Singh pursuing a PhD in Curriculum & Instruction, Clemson University
- Co-Chair & Member of Doctoral Committee (Research Methods) for Debra Wallace pursuing a PhD in Education Leadership, Clemson University
- Member of Doctoral Committee (Research Methods) for Brandi Kamp pursuing a PhD in Curriculum & Instruction, Clemson University
- Member of Doctoral Committee (Research Methods) for Sunil Pokhrel pursuing a PhD in Curriculum & Instruction, Clemson University

- Member of Doctoral Committee (Research Methods) for Nick Whitrow pursuing a PhD in Education Leadership, Clemson University
- Member of Doctoral Committee (Research Methods) for Kim Dunn Misener pursuing a PhD from Gallaudet University
- Member of Doctoral Committee (Research Methods) for Jennifer Johnson (Calabria) pursuing a PhD in Parks, Recreation, and Tourism Management, Clemson University
- Member of Doctoral Committee (Research Methods) for Kristen Hill pursuing a PhD in Education Leadership, Clemson University
- Member of Doctoral Committee (Research Methods) for Kacie Kingsmore pursuing a PhD in Curriculum and Instruction, Clemson University
- Honors advisor for Bachelor of Elementary Education program, Department of Teaching & Learning, Clemson University (2015-2019)
- Undergraduate advisor for Bachelor of Elementary Education program, Department of Teaching & Learning, Clemson University (2009-2019)
- Initial Advisor for Khushbu Singh starting PhD in Curriculum & Instruction, Clemson University (2017-2019)
- Initial Advisor for Sunil Pokhrel starting a PhD in Curriculum & Instruction, Clemson University (2018-2019)
- Initial Advisor for Brandi Kamp starting a PhD in Curriculum & Instruction, Clemson University (2012-2013)

Previous advising work:

- Member of Doctoral Committee (Research Methods) for Michelle Fowler pursuing a PhD in Curriculum and Instruction, Clemson University (graduated Summer 2021)
- Member of Doctoral Committee (Research Methods & Content) for Laura Eicher pursuing a PhD in Curriculum & Instruction, Clemson University (graduated Spring 2021)
- Member of Doctoral Committee (Research Methods) for Mary Hanna pursuing a PhD in Education Leadership, Clemson University (graduated Fall 2020)
- Member of Doctoral Committee (Research Methods) for Jessica Pelfrey pursuing a PhD in Higher Education, Clemson University (graduated Summer 2020)
- Member of Doctoral Committee (Research Methods) for Herminia Machry pursuing a PhD in Architecture & Health, Clemson University graduate Fall 2019)
- Member of Doctoral Committee (Research Methods) for Cindy Riyad pursuing a PhD in Education Leadership, Clemson University (graduated Summer 2019)
- Member of Doctoral Committee (Research Methods) for Courtney Allen pursuing a PhD in Education Leadership, Clemson University (graduated Spring 2019)
- Member of Doctoral Committee (Research Methods) for Rachel Lang-Bald pursuing a PhD in International and Family Studies, Clemson University (Spring 2017-Spring 2019)
- Member of Doctoral Committee (Research Methods) for Koti Hubbard pursuing a PhD in Literacy, Language, & Culture, Clemson University (graduated Summer 2018)
- Member of Doctoral Committee (Research Methods) for Katie Maxwell pursuing a PhD in Education Leadership, Clemson University (graduated Summer 2018)
- Member of Doctoral Committee (Research Methods) for Robbie Higdon pursuing a PhD in Curriculum and Instruction, Clemson University (graduated Fall 2017)
- Member of Doctoral Committee (Research Methods) for DeShawn Preston pursuing a PhD in Education Leadership, Clemson University (graduated Spring 2016)
- Member of Doctoral Committee (Research Methods) for Steven Brian Joyce pursuing a PhD in Education Leadership, Clemson University (graduated Summer 2016)
- Member of Doctoral Committee (Research Methods) for Emily Holwell pursuing a PhD in Curriculum and Instruction, Department of Curriculum and Instruction, Clemson University (graduated Fall 2015)

- Chair of Doctoral Committee for Rory Tannebaum pursuing a PhD in Curriculum and Instruction, Clemson University (graduated in Spring 2015)
- Undergraduate Honors Student Thesis Mentor for Sarah Dickenson (Fall 2013 Fall 2015)
- Undergraduate Honors Student Thesis Mentor for Vicki Oberholtzer (Fall 2014 Spring 2015)
- Undergraduate Honors Student Thesis Mentor for Courtney Stevens (Spring 2014)
- Member of Doctoral Committee (Research Methods) for Katherine Evans pursuing a PhD in Parks, Recreation, and Tourism Management, Clemson University (graduated)
- Member of Doctoral Committee (Research Methods) for Serbay Zambak pursuing a PhD in Curriculum and Instruction, Clemson University (graduated)
- Member of Doctoral Committee for Angela Prince who received her PhD in Curriculum and Instruction Clemson University (graduated August 2013)
- Member of Doctoral Committee (Research Methods) for Jamie Colwell who received her PhD in Curriculum and Instruction, Clemson University (graduated May 2012)
- Graduate advisor for graduate students in Master of Curriculum and Instruction in Elementary Education,
 Department of Curriculum and Instruction Elementary Education, University of Mississippi (2006-2008)
- Undergraduate and Honors College Advisor for Candace Gully on conducting research on preservice elementary teachers' self-efficacy for working with Special Education student, Sally McDonnell Barksdale Honors College Thesis, University of Mississippi (2007-2008)
- Research advisor for Shawn L. Coskey, doctoral candidate/graduate instructor, on developing an action research project on her EDEL 351: Foundations for Professional Growth course (Fall 2007)
- Research advisor for Steve Case, doctoral candidate/graduate assistant, on the development of a Philosophy of Science course for education and non-education majors, Center for Mathematics and Science Education, University of Mississippi (Fall 2007)

SERVICE

Service to Field of Scholarship:

- Member of GLOBE USPF Goal 2 Review Committee (January 2020-current)
- Research Collaborator National Center for Science Education's Nature of Science Teacher Ambassador Program (2019-current)
- Editorial Board Review Member for Handbook of Research on Innovation Techniques, Trends, and Analysis for Optimized Research Methods (Spring 2017)
- Editor for Council for Elementary Science International's Sourcebook (2015)
- Reviewed Chapter Submission for a book, Mobile Technologies: Perspectives on Policy and Practice (Spring 2017)
- Manuscript reviewer for Journal of Teacher Education (2016, 2017)
- Elected member of the Board of Directors for the Council for Elementary Science International (2013-2016)
- Chair of the Council for Elementary Science International Membership Committee (2013-2016)
- Ad-hoc member of the Council for Elementary Science International Elections Committee (2015)
- Manuscript reviewer for Action in Teacher Education journal (2013, 2015)
- Manuscript reviewer for Science Activities journal (2013)
- Member of National Association for Research in Science Teaching's Outstanding Paper Award Committee (2011-present)
- Reviewer of National Association for Research in Science Teaching (NARST) 2014 Conference proposals
- Member of Editorial Review Board for Journal of Science Teacher Education (2009-2012)
- Reviewer of American Educational Research Association (AERA) 2013 Conference proposals
- Reviewer of Association for Science Teacher Education (ASTE) 2011 Conference proposals

- Member of Committee on Preservice Teacher Preparation, National Science Teachers Association (2008-2011)
- Book Reviewer for Journal of Integrative and Comparative Biology (2009)
- Book Reviewer for the Kappa Delta Pi association (2004)
- Reviewer for the Building Resources: An Induction Design for Georgia Educators (BRIDGE) (2004-2007)
- Reviewer of Teacher Quality Grants for Georgia Department of Education (2004)
- Reviewer of National Association for Research in Science Teaching (NARST) 2005 Conference Proposals
- Volunteer for the Southeastern Association for Science Teacher Education (SASTE) 2005 Conference

Service to University:

- Member of the Organization of Academic Department Chairs at Clemson University, (2018-current)
- Elected member of the Department of Teaching & Learning Tenure, Promotion, & Reappointment Committee (2017-2018)
- Elected member of University Academic Grievance Board (B1h) (2016-2018)
- Elected member of the College of Education Community and Diversity Committee (2016-2018)
- Elected member of the Clemson University Parking Review Board (2014-2017)
- Chair of the ETM School of Education Elections Committee (Spring 2015-Spring 2017)
- Chair of the Teaching & Learning Elections Committee (Spring 2015-Spring 2017)
- Member of Department of Teaching & Learning Elections Committee (2010-2017)
- Member of Search Committee for the Elementary Education's Mathematics Faculty position (2016-2017)
- Chair of the Search Committee for the Elementary Education Clinical Faculty position (2016-2017)
- Member of the Department of Teaching & Learning adhoc Bylaw amendment committee (Spring 2017)
- Member of the Department of Teaching & Learning adhoc Bylaws and Faculty Manual compliance committee (Fall 2016)
- Member of the Field Placement/Partnership Working Group (chaired by the Executive Director of the Office of Field and Clinical Partnerships and Outreach) (Fall 2016)
- Member of Student Teacher Reception Committee (2015-2016)
- Member of the Field Placement Protocol Committee (Spring 2016)
- Search Committee member for the position of the Director for Field Placement (2014-2015)
- Member of Clemson University Strategic Planning Initiative: Phase2 of 2020Forward (Problem Based Learning & Interdisciplinary Majors Committee) (Spring 2015)
- Member of the Department of Teaching & Learning Name and Vision Statement Committee (2014-2015)
- New Faculty Mentor (2013-2014)
- Chair of adhoc Qualitative Research Group Committee (2010-2014)
- Member of Department of Teacher Education's Doctoral Advisory Committee (2009-2013)
- Member of Search Committee for the position of the two Educational Psychology faculty (2012-2013)
- Member of Elementary Education Reinvention Committee (2008-2011)
- Member of Search Committee for the position of the Elementary Education's Arts instructor (2011-2012)
- Member of Search Committee for two positions for the Elementary Education's Mathematics Science instructors (2009-2010)
- Member of Search Committee for the position of the MAT's Middle School Science instructor (2008-2009), (2009-2010)
- Served on the Faculty Travel Committee in the Department of Curriculum and Instruction at the University of Mississippi (2006-2008)
- Member of Research Board Standing Committee at the University of Mississippi (2006-2007)
- Member of Graduate Admissions Committee in the Department of Curriculum and Instruction at the University of Mississippi (2006-2007)
- Member of Support and Social Committee in the Department of Curriculum and Instruction at the University of Mississippi (2006-2007)

- Director/Coordinator for the Traveling Trunks (teacher curriculum kits) committee for the Department of Curriculum and Instruction at the University of Mississippi (2007,2008)
- Member of evaluation team for Master's Written Comprehensive Exams in the Department of Curriculum and Instruction (2007-2008)
- Member of evaluation team for Master's Portfolios in the Department of Curriculum and Instruction (2007-2008)
- Member of evaluation team for Doctoral Program's Preliminary Oral Examinations in the Department of Curriculum and Instruction (2007-2008)
- Member of NCATE Professional Development Schools committee (Oxford Elementary School) for NCATE (March 2007)

Service at National, State and Regional Level:

- Member of Project Learning Tree Steering Committee for South Carolina (Fall 2018-current)
- Reviewed and evaluated tenure notebook for Dr. Brant Miller (Assistant Professor going up for Associate Professor at another university) (Fall 2016)
- Reviewed and evaluated tenure notebook for Dr. Tammy Brown (Assistant Clinical Professor going up for Associate Clinical Professor at another university) (Fall 2016)
- Facilitate Project Learning Tree workshops for in-service teachers (2009-2007)
- Facilitate Early Childhood and Elementary science lessons with public and private PreK-5th grade students. (Spring 2017 Spring 2018)
- Facilitate Project Learning Tree workshop and environmental science workshop with South Carolina Botanical Garden collaborators (Spring 2017)
- Facilitated Project Learning Tree workshops for preservice teachers (2008-present)
- Collaborated with SC Botanical Gardens to develop and facilitate a one-day workshop focused on inquirybased practices, nature-based lesson, and Project Learning Tree for PreK-6th grade teachers (May 2016)
- Facilitate iScience (Inquiry Science with Mobile Learning) professional development for Spartanburg, SC (2015-2016)
- Facilitate LMaST (Learning Mathematics and Science with Technology) professional development for Spartanburg, SC (2013-2016)
- Facilitate Project RES: Reform-based Environmental Science workshop for Spartanburg, SC teachers (2013-2016)
- Facilitated Project RES: Reform-based Environmental Science workshops for Orangeburg SC teachers (2009- 2013)
- Facilitated Science Process Skills and Nature of Science workshop for Summit Drive Elementary School, Greenville, South Carolina (Spring 2012)
- Facilitated GLOBE workshops on Clouds and Elementary Protocols (2010, 2012)
- Facilitated a free Environmental Science Camp (Camp ESI) for K-8th grade students in Brunswick, Georgia (2010)
- Facilitated a free Environmental Science Camp for K-8th grade students in Orangeburg,SC (2009)
- Judged the Della Davidson Science Fair at Della Davidson Elementary School in Oxford, Mississippi (2008)
- Volunteer Substitute for Lafayette Lower Elementary School in Oxford, Mississippi (Fall 2007)
- Judged for the Central Elementary Science Fair at Central Elementary School in Oxford, Mississippi (2007)
- Supported the Science Teachers and Parents of Oxford Elementary School in the development of a proposal for a new science laboratory (2007)

Service to Profession:

- American Educational Research Association, member (2006-present)
- National Association for Research in Science Teaching (NARST), member (2004-present)
- National Science Teacher Association (NSTA), member (2003- present)

- Association for Science Teacher Education (ASTE), member (2005-present)
- Council for Elementary Science International (CESI), lifetime member
- Association of Southeastern Biologists (ASB), member (2012)
- Association for Educational Communications and Technology, member (2009-2010)
- South Carolina Science Council, member (2009-2010)
- South Carolina Association of College for Teacher Education (2009-2010)
- Southern Association for Science Teacher Education (SASTE), member (2004-2005, 2008)
- Council for Elementary Science International, member (2009, 2012-currentl)
- University of Mississippi's Phi Delta Kappa International, Chapter Historian (Spring 2008)
- Phi Delta Kappa International, member (2008)
- Kappa Delta Pi, member, (2003-2008)
- Georgia Science Teacher's Association (GSTA), member (2003-2006)